promises to stir up a cloud of controversy, with science arrayed on one side and the proponents of testimonial cancer cures on the other.

As the Legislature gets under way in the next few weeks, additional reports will be forthcoming on the status of many individual proposals now under consideration. Meanwhile, there is every indication that medicine again faces a host of unwanted legislation and must continue to keep its guard up. Fortunately, the legislative forces of the C.M.A. are established on firm ground. Their vigilance and their performance may be counted upon without question.

## Letters to the Editor . . .

To the Editor:

AFTER READING Dr. Ian Macdonald's reply to my protest against a section of the Cancer Commission's manual dealing with the question of a trial of androgen in refractory prostatic carcinoma [CALIFORNIA MEDICINE, March, 1957, page 189], I still cannot agree. Will you not, therefore, let me present factual data in support of my dissent:

Huggins, Stevens, and Hodges, in 1941¹ demonstrated that castration or estrogen therapy produced important palliation in prostatic carcinoma. They also studied the effects of androgen and found that it aggravated the tumor. Widespread investigation since that time has corroborated their findings. I have personally observed several patients subjected to androgen, to which most of them responded with increased pain from their metastases and sometimes with an aggravation of urinary symptoms or the appearance of a hemorrhagic diathesis. In one case, the drug appeared to have no effect whatsoever. In those patients made worse by androgen, the difficulties of palliation appeared increased despite withdrawal of the drug.

Tagnon and co-workers,2 in a study of the bleeding tendency sometimes seen in advanced prostatic carcinoma, controlled bleeding due to prostatic fibrinolysis by giving estrogen. In one case, bleeding could be produced regularly by administering androgen. In four other cases, the experimental use of androgen had to be stopped because of aggravation of other symptoms. Whitmore, et al,3 studied the effects of testosterone administration to more than twenty patients with advanced prostatic carcinoma. In twothirds of these patients they observed neither subjective nor objective changes of any sort, but in the others, there was an unfavorable response. Scott<sup>4</sup> gave testosterone to three patients with advanced prostatic carcinoma in a carefully controlled study. Two patients appeared to be improved. Scott did not recommend that androgen be given in this disease but stated that further research would be of interest.

Because of Scott's report, and because a member of the Cancer Commission wrote me that he believed new information would show androgen to be valuable. I remained in doubt. In order to obtain an up to date and impartial opinion I wrote the A.M.A. and promptly received an answer from their urologic consultant which was later published in the Journal of the American Medical Association.<sup>5</sup> He stated. "There is no evidence to show that a cautious or any other type of trial of androgenic hormone is justifiable in patients with carcinoma of the prostate resistant to estrogen. A number of years ago, an occasional patient was found to respond temporarily in general health to large doses of androgen when suffering from carcinoma of the prostate with multiple metastases. The brevity of this improvement was emphasized by rapid dissemination of the disease and subsequent death."

The danger of aggravating the disease in late stages by androgen appears to outweigh any hope of control or palliation. Although cortisone<sup>6</sup> may be helpful to patients refractory to castration and estrogens, testosterone should be withheld and symptomatic treatment should be given as needed.

Sincerely yours, Frederick S. Howard, M.D.

## REFERENCES

- 1. Huggins, C., Stevens, R. E., Jr., and Hodges, C. V.: Studies in prostatic cancer, Arch. Surg., 43:209, 1941.
- 2. Tagnon, H. J., Schulman, P., Whitmore, W. F., and Leone, L. A.: Prostatic fibrinolysin, Am. J. Med., 15:875,
- 3. Whitmore, W. F., Randall, H. T., Pearson, O. H., and West, C. D.: Adrenalectomy in prostatic cancer, Geriatrics, 9:62, 1954.
- 4. Scott, W. W.: Carcinoma of the Prostate in Meredith Campbell's Urology, Saunders, 1954 (p. 1161).
- 5. Queries and minor notes, J.A.M.A., 163:704, Feb. 23, 1957.
- 6. Valk, W., and Owens, R. H.: Effect of cortisone on patients with carcinoma of the prostate, J. Urol., 71:219, 1054